Pulsed Neutron
Gamma Ray
Casing Collar Log

RELIANCE OILFIELD SERVICES

Company	TEP Rocky Mountain LLC
Well	Ware SR 522-12
Field	Rulison
County	Garfield
State	Colorado

Company TEP Rocky Mountain LLC

Well Ware SR 522-12

Field Rulison

County Garfield State Colorado

Location: API # : 05-045-23447

1822' FSL & 2294' FWL NESW

SEC 12 TWP 7S RGE 94W

Other Services: RBL

Permanent Datum	Ground Level	Elevation	7479'
Log Measured From	Kelly Bushing	24 FT	
Drilling Measured From	Kelly Bushing		

Elevation
K.B. 7503'
D.F. 7502'
G.L. 7479'

Date	07-DEC-2017		
Run Number	One		
Depth Driller	9634 FT		
Depth Logger	9571 FT		
Bottom Logged Interval	9565 FT		
Top Log Interval	6848 FT		
Open Hole Size	8.750"		
Type Fluid	Fresh Water		
Density / Viscosity	8.34 lb/gal		
Max. Recorded Temp.	---		
Estimated Cement Top	---		
Time Well Ready	---		
Time Logger on Bottom	---		
Equipment Number	---		
Location	Grand Junction, CO		
Recorded By	J.Donnelly		
Witnessed By	---		

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To

Casing Record	Size (in)	Wgt (lbs/Ft)	Grade	Top	Bottom
Surface Casing	9 5/8	32.3	H-40	Surface	1122 FT
Intermediate #1	4 1/2	11.6	P-110	Surface	9592 FT
Intermediate #2					
Liner					

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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

Comments

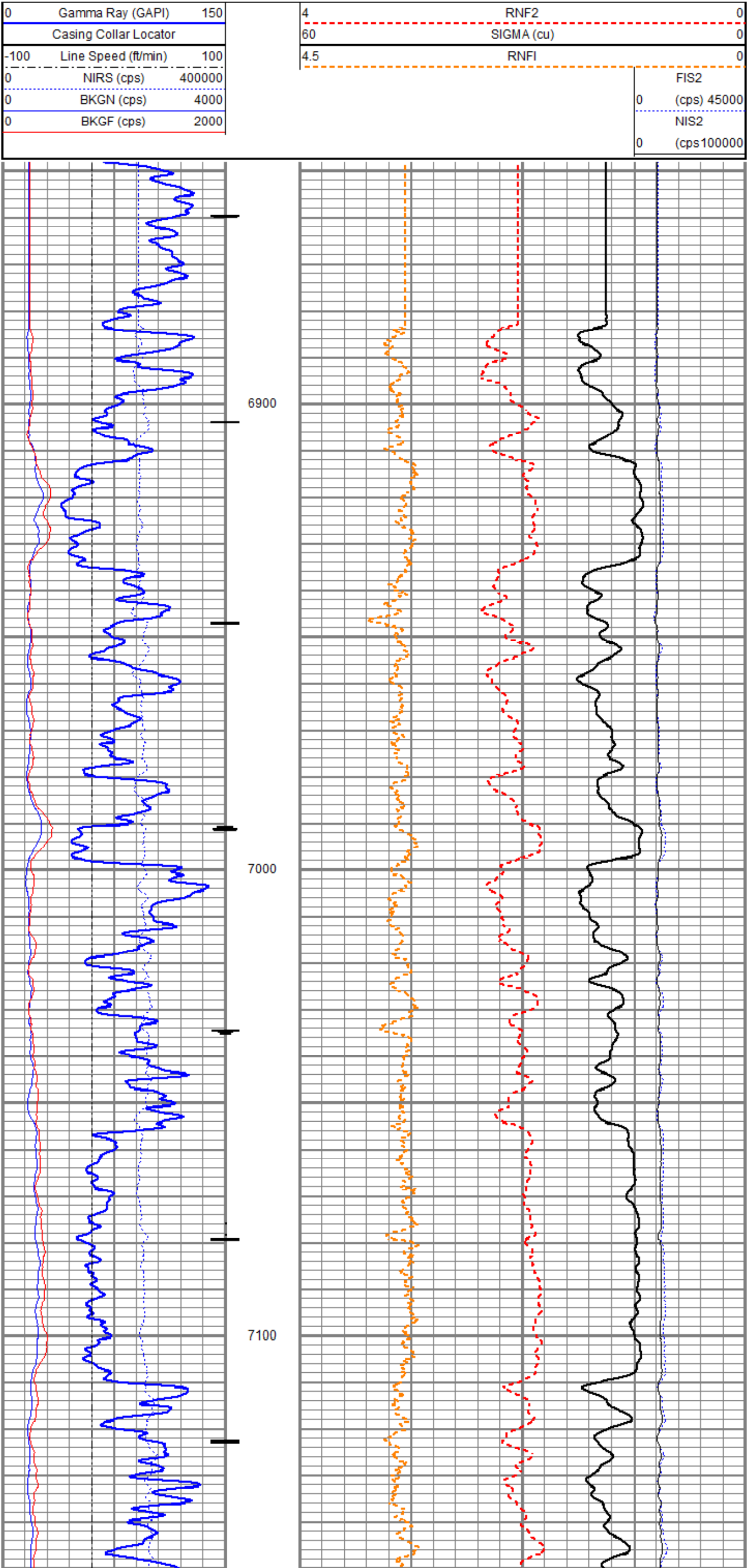
Log ran as per customer request
Depth referenced to Reliance Bond Log dated 08-DEC-2017
Log ran from 9565 FT to 6848 FT
Pulsed Neutron Data logged with the Hunter RAS Tool

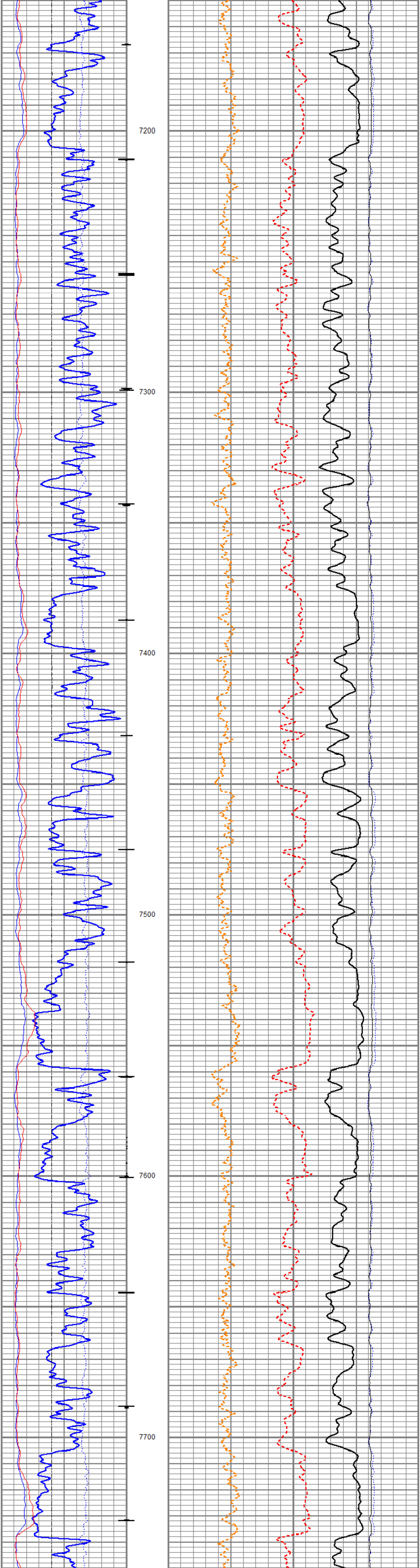
Thank you for choosing Reliance Oilfield Services, LLC!!

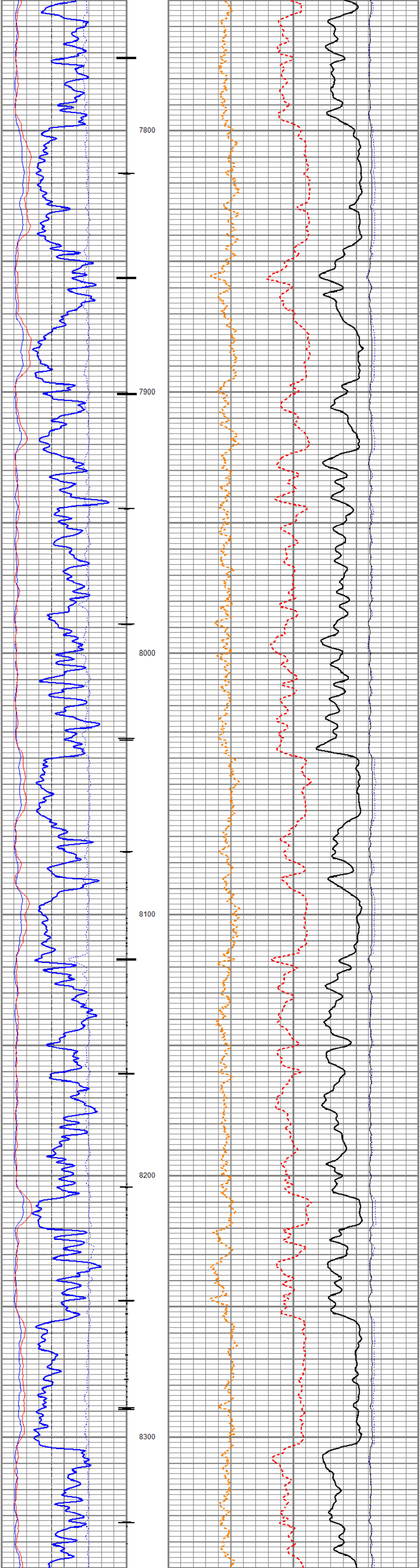
RELIANCE OILFIELD SERVICES

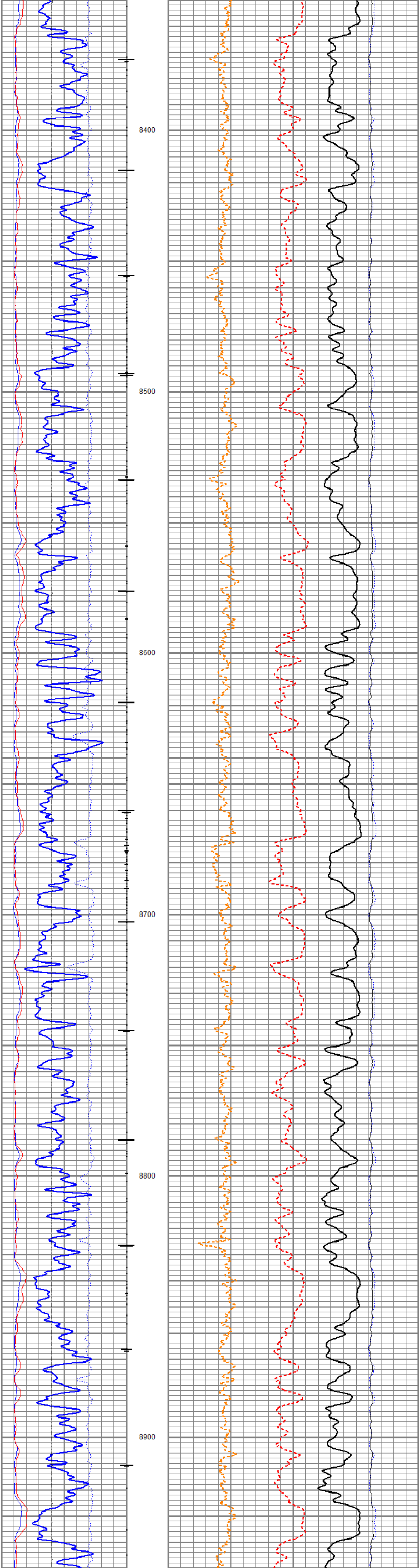
Main Pass

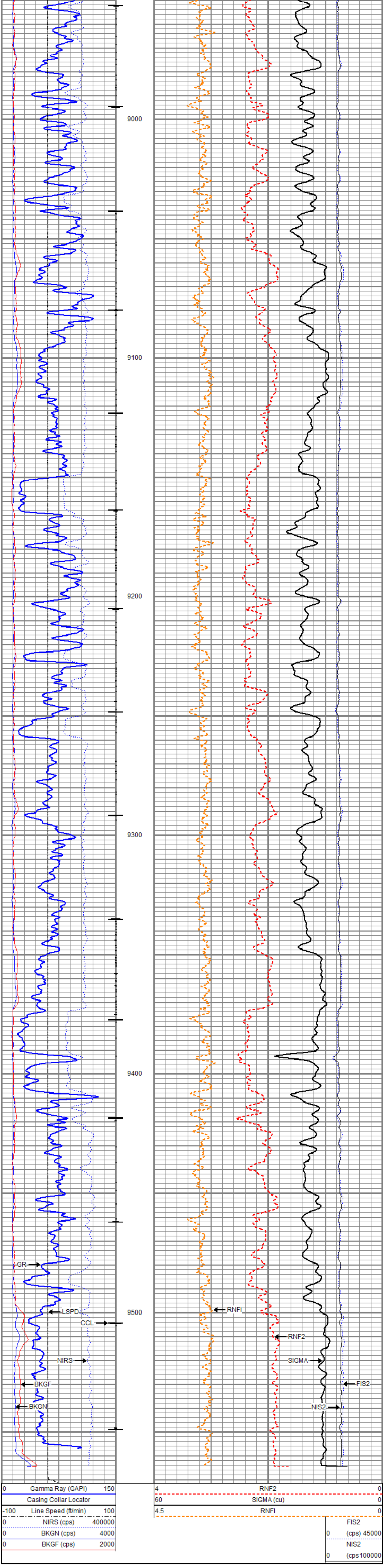
Database File	tep\sr 522-12\20171208\pn\tep_sr_522-12_pdn\tep_ware sr 522-12_pn_12-07-17.db
Dataset Pathname	Main
Presentation Format	ros_pdn_hunter
Dataset Creation	Thu Dec 07 14:41:50 2017
Charted by	Depth in Feet scaled 1:240











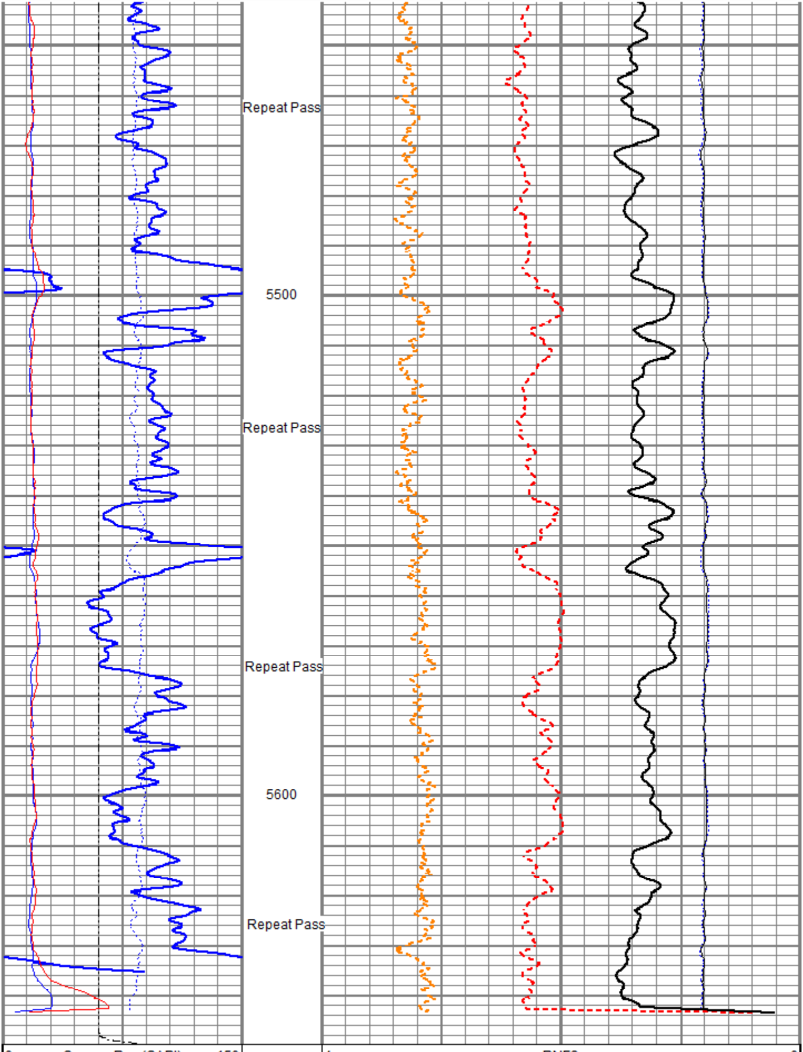
Repeat Pass

Database File tep\sr 522-12\20171208\pn\tep_sr_522-12_pdn\tep_ware sr 522-12_pn_12-07-17.db
Dataset Pathname Repeat
Presentation Format ros_pdn_hunter
Dataset Creation Thu Dec 07 19:04:18 2017
Charted by Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	150
-100	Line Speed (ft/min)	100
0	NIRS (cps)	400000
0	BKGN (cps)	4000
0	BKGF (cps)	2000

4	RNF2	0
60	SIGMA (cu)	0
4.5	RNFI	0

	FIS2
0	(cps) 45000
	NIS2
0	(cps100000



0	Gamma Ray (GAPI)	150
-100	Line Speed (ft/min)	100
0	NIRS (cps)	400000
0	BKGN (cps)	4000
0	BKGF (cps)	2000

4	RNF2	0
60	SIGMA (cu)	0
4.5	RNFI	0

	FIS2
0	(cps) 45000
	NIS2
0	(cps100000

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb
			HWS_TCU-001 (001704) HWS Telemetry Control Unit	1.52	1.69	7.80
TCUTEMP	14.69					
TCUVOLT	14.69					
GCL_CCL	13.97					
			HWS_GCL-001 (001475) HWS Gamma Ray Collar Locator (1.6875")	2.69	1.69	13.40
GCL_GR	12.50					
Long	6.25		HWS_RAS-RAS001 (003040) Hunter Well Science Pulsed Neutron Tool	11.75	1.69	55.82
Far	6.25					
Near	6.25					
Anci	6.25					
GCL_GR	0.25		HWS_TBN-001 (000001) HWS Terminator Bull Nose (1.6875")	0.25	1.69	0.99

Dataset: tep_ware sr 522-12_pn_12-07-17.db: field/well/run1/Main
Total length: 16.21 ft
Total weight: 78.01 lb
O.D.: 1.69 in

Calibration Report

Database File c:\programdata\warrior\data\tep\sr 522-12\20171208\pn\tep_sr_522-12_pdn\tep_ware sr 522-12_pn_12-07-
Dataset Pathname Main
Dataset Creation Thu Dec 07 14:41:50 2017

Gamma Ray Calibration Report

Serial Number:	001475	
Tool Model:	001	
Performed:	(Not Performed)	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	
Calibrator Reading:	1.0	
Sensitivity:	1.0000	GAPI/

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